

Abstract

The method for monitoring the stability of the carrier frequency (ω_i) of identical transmitted signals ($s_i(t)$) of several transmitters S_i of a single-frequency network is based upon a calculation of a carrier-frequency displacement $\Delta\omega_i$ of a carrier frequency ω_i of a transmitter S_i relative to a carrier frequency ω_0 of a reference transmitter S_0 . For this purpose, the phase-displacement difference ($\Delta\Delta\Theta_i(t_{B2}-t_{B1})$) caused by the carrier-frequency displacement $\Delta\omega_i$ between a phase displacement $\Delta\Theta_i(t_{B1})$ at a first observation time t_{B1} and a phase displacement $\Delta\Theta_i(t_{B2})$ at a second observation time t_{B2} of a received signal ($e_i(t)$) of the transmitter S_i associated with the respective transmitted signal ($s_i(t)$) is determined relative to a received signal $e_0(t)$ of the reference transmitter S_0 associated with the reference transmitted signal $s_0(t)$.